

# **LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE**

**For The Technical Direction Of The LTPP Program**

**Program Area:** Monitoring **Directive Number:** PROF-2

**Supersedes:** SHRP Directive P-1 **Date:** September 1, 1994

**Subject:** Profile Monitoring Frequency and Priorities

This directive documents the nominal profile measurement frequency for all Long-Term Pavement Performance (LTPP) test sections and the priorities to be considered when all required measurements cannot be completed.

## **A. Measurement Frequency**

1. The nominal frequency for routine profile measurement of LTPP test sections shall be as follows. Where a given test section is included in more than one of the categories outlined, the maximum measurement frequency applies.

<b>LTPP Experiment/Program</b>	<b>Nominal Measurement Frequency</b>	<b>Remarks</b>
GPS	Biannual	Approximately 1/2 of all test sections to be tested in any one year
SPS	Biannual	See 2 and 3 below
Seasonal Monitoring - sites which freeze	5 times/year every other year	Twice during winter season, once per season otherwise
Seasonal Monitoring - sites which do not freeze	4 times/year every other year	Once per season
WIM locations	At time of calibration	Additional measurements will be conducted on selected sites at varying frequencies

2. Pre-construction measurement for SPS-3, -4, -5, -6 and -7 projects and post-construction measurement for all SPS projects is to be conducted within 3 months of construction. Where this is not feasible, measurement up to 6 months prior to (in the case of pre-construction measurement) or after (in the case of post-construction measurement) actual construction will suffice.

4. Measurement of Sections 2, 4, 8, and 10 in SPS-1 projects and Sections 1, 5, 8, and 12 in SPS-2 projects (hereafter referred to as "weak" sections) is to be conducted every six months. Where this is not feasible, measurement intervals up to once per year will suffice.

4. Pre-construction or terminal measurement is to be conducted on any section which is to be modified (overlaid, reconstructed, etc.), whether it will continue as an LTPP test section or not. Where feasible, measurement should be conducted not more than 3 months prior to construction. Where this is not feasible, measurement up to 6 months prior to actual construction will suffice.

## **B. Priorities**

Where resource limitations prohibit completion of all planned profile measurements, the following order of precedence shall be followed in setting priorities.

<b>Priority Level</b>	<b>Type of Measurement</b>	<b>Remarks</b>
1	Pre-construction measurement for SPS-3, -4, -5, -6 and -7 experiments	
1	Post-construction measurement for SPS-1, -2, -5, -6 and -7 experiments	Measurement may be postponed if absolutely necessary, but must be completed within 6 months of the specified time.
1	Pre-construction or terminal measurement for any section (GPS or SPS) which is to be modified	
1	Seasonal monitoring of sites which have been instrumented	Surveying of seasonal monitoring sites which have not been instrumented is not required.
2	Measurement of "weak" SPS-1 or -2 sections	Measurement may be postponed if absolutely necessary, but must be completed within 6 months of the specified time.
2	Long term measurement of GPS and SPS sites	Measurement may be postponed up to 1 year.
3	WIM locations	Measurement may be postponed up to 1 year.

**Approval** \_\_\_\_\_

**Paul Teng, Chief LTPP Division**